

REMARKS

Claim 1, which refers to SEQ ID NO:119, has been amended. In the sequence listing and in the specification it is stated that within SEQ ID NO:119, Xaa₁, Xaa₂, Xaa₃, Xaa₄, Xaa₅, Xaa₈, Xaa₁₂, Xaa₁₃, Xaa₁₄, Xaa₁₆, Xaa₁₇, Xaa₁₉, Xaa₂₀ and Xaa₂₁ can be any amino acid. Claim 1 has been amended to specify that each of Xaa₈, Xaa₁₂, Xaa₁₃, Xaa₁₄, Xaa₁₆, Xaa₁₇, Xaa₁₉, Xaa₂₀ and Xaa₂₁ can be Ala, Arg, Asn, Asp, Cys, Gln, Glu, Gly, His, Ile, Leu, Lys, Met, Phe, Pro, Ser, Thr, Trp, Tyr or Val (any of the 20 naturally-occurring amino acids). Support for this amendment is found throughout the present application, including on page 40. No new matter has been added. An amended Sequence Listing is being filed separately.

Applicants appreciate the notification that claim 20 is allowable.

Applicants note that U.S. Application No. 10/766,735, from which the present application claims priority, is pending.

Rejections Under 35 U.S.C. §112, second paragraph

The Examiner rejected claims 1, 5 and 8-13 as indefinite, stating that it "unclear what amino acid substitutions, if any, can be made for the undefined variables" such as Xaa₈, Xaa₁₂, etc. It is Applicants' position that the claims are not indefinite. The sequence listing states that certain of the residues denoted Xaa can be any amino acid. However, to facilitate ready understanding of the claims, Applicants have amended claim 1 to list all of the 20 naturally-occurring amino acids in those cases where a particular residue can be any amino acid. In view of the forgoing, Applicants respectfully request that the rejections under 35 U.S.C. §112, second paragraph be withdrawn.

Rejections Under 35 U.S.C. §102(b)

The Examiner rejected claims 1, 5 and 8-13 as anticipated by Giannella (*J Lab Clin Med* 125:173, 1995). The Examiner stated that the claims were anticipated because Giannella discloses a peptide (the *E. coli* STh peptide) having the sequence:
NSSNYCCELCCNPACTGCY.

The *E. coli* STh peptide does not anticipate any of the present claims because it does not include all of the elements present in the currently claimed peptide. For example, because Xaa₉ within SEQ ID NO:119 must be Phe, Trp or Tyr (F, W or Y), SEQ ID NO:119 must include one of the following sequences (corresponding to Cys₆ Cys₇ Xaa₈ Xaa₉ Cys₁₀ Cys₁₁ of SEQ ID NO:119): CCXFCC, CCXWCC or CCXYCC where X is any of: A, R, N, D, C, Q, E, G, H, I, L, K, M, F, P, S, T, W, Y or V. None of these sequences appear in any of the peptides disclosed by Giannella. For a reference to anticipate a claimed invention "every element of the claimed invention must be identically shown in a single reference" *In re Bond*, 910 F.2d 831 (Fed. Cir. 1990). Thus, Giannella cannot anticipate any of the present claims.

In view of the forgoing, Applicants respectfully request that the rejections under 35 U.S.C. §102(b) be withdrawn.

It is believed that the claims are in condition for allowance. Please apply any charges or credits to deposit account 06-1050.

Respectfully submitted,

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